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**MANUFACTURE OF LIQUID CRYSTAL DISPLAY BODY DEVICE**

Patent Number: JP57088428  
Publication date: 1982-06-02  
Inventor(s): OGASAWARA TSUTOMU  
Applicant(s): RICOH ELEMEX CORP  
Requested Patent: ☐ JP57088428  
Application Number: JP19800164447 19801120  
Priority Number(s):  
IPC Classification: G02F1/13; G09F9/00  
EC Classification:  
Equivalents:

**Abstract**

**PURPOSE:** To inject a liquid crystal into a cell exactly in a short time, by dripping the liquid crystal from a dispenser to a trumpetlike liquid crystal injecting port of a liquid crystal cell placed in an airtight vessel kept in a vacuum state, and after that, pressurizing the inside of the vessel.

**CONSTITUTION:** A liquid crystal display body cell 6 whose substrate is made of a synthetic resin film having a trumpetlike liquid crystal injecting port 6A is placed in an airtight vessel 5, and in the upper direction of this cell 6, a dispenser tip part 12 having a small hole 12A is fixed to a work table 10 which can be rotated up and down and to the right and left. Subsequently, the inside of the vessel 5 is made to a vacuum state by opening a valve 13, the table 10 is moved and is controlled so that a distance between the injecting port 6A and the hole 12A of the tip part 12 becomes constant, and after that, from a liquid crystal vessel 8 which has been cut off from the open air, a liquid crystal 7 of a constant quantity is dripped into the injecting port 6A through a dispenser 9, a feed pipe 11, the tip part 12 and the hole 12A. Subsequently, the inside of the vessel 5 is returned to the atmospheric pressure by opening a valve 14, and the liquid crystal 7 is injected into the cell 6.

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状の液晶注入口6Aは液晶注入後必要に応じて切断してもよい。

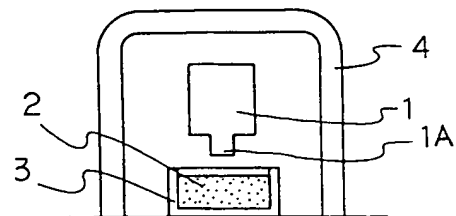
図面の簡単な説明

第1図は従来の液晶表示体セルへの液晶注入方法を説明する為の断面図。

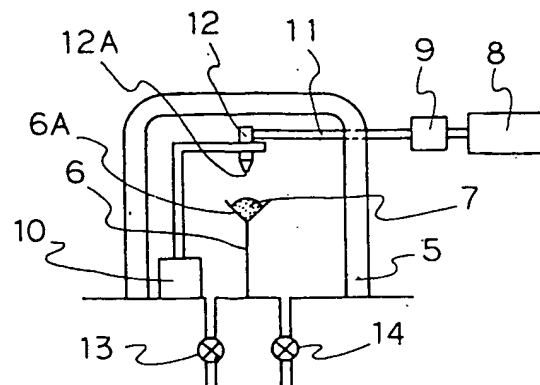
第2, 3図は本発明の実施例を示す断面図。

1…液晶表示体セル 1A…液晶注入口 2…液晶  
3…液晶充填容器 4…気密容器  
5…気密容器 6…液晶表示体セル 6A…液晶注  
入口 7…液晶 8…液晶容器 9…ディスペン  
サー 10…作業台 11…液晶輸送管 12…ディス  
ペンサー先端部 12A…穴 13…バルブ 14…バル  
ブ

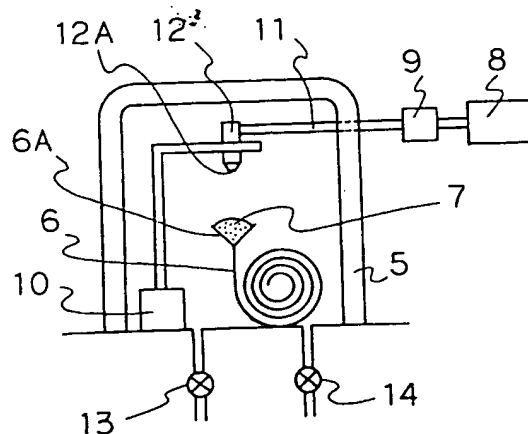
特許出願人の名称 リコー時計株式会社



第1図



第2図



第3図